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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,863	03/03/2004	Ryouta Hata	2004-0282A	3109

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WENDEROTH, LIND & PONACK, L.L.P.  
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SUITE 800  
WASHINGTON, DC 20006-1021

EXAMINER
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DHARIA, PRABODH M

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/20/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/20/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

wlp@wenderoth.com  
tasha@wenderoth.com

**Office Action Summary**

Application No.

10/790,863

Applicant(s)

HATA ET AL.

Examiner

Prabodh M. Dharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06-17-04, 07-29-04, 01-18-07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

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***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 01-18-2007, 29-07-2004 and 06-17-2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because total word count exceeds 150.

Correction is required. See MPEP § 608.01(b).

5. **Status:** Please all replies and correspondence should be addressed to examiner's new art unit 2629. Receipt is acknowledged of papers submitted on 03-03-2004 under new application, which have been placed of record in the file. Claims 1-16 are pending in this action.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4,6-10 and 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawabe et al. (US 7,161,576 B2).

Regarding Claim 1, Kawabe et al. teaches a display method (Col. 7, Lines 50,51,64, Col. 35, Lines 25,26) for use with a light source (Col. 8, Lines 9-15); and a display device operable to display pictures in accordance with a video signal (see figure 70 item # 7402, the video data received by 7401 and header is part of the received video data having required video data for image display Col. 42, Lines 54-65, Col. 35, Lines 31-41), said method comprising: displaying pictures on the display device according to a display timing (Col. 42, Line 65 to Col. 43, Line 6); illuminating the display device with light from the light source in response to a light source-controlling signal (Col. 27, Line 67 to Col. 28, Line 8, Col. 8, Lines 8-15); changing an amount of light emitted from the light source according to a light-change timing (Col. 26, Line 29 to Col. 27, Line 30, Col. 28, Lines 42-47); and synchronizing the display timing with the light-change timing (Col. 26, Line 29 to Col. 27, Line 30, Col. 42, Line 65 to Col. 43, Line 6).

Regarding Claim 2, Kawabe et al. teaches video signal-analyzing unit 1 matches the timing at which said light source changes the light-emitting amount with a timing at which said display device renews half of an image plane (Col. 23, line 23 to col. 24, line 4, Col. 24, Lines 33-64, Col. 27, Line 47 to col. 28, Line 19).

Regarding Claim 3, Kawabe et al. teaches video signal-analyzing unit synchronizes, in response to a Vsync-signal from said display device, the timing at which said display device displays the picture with the timing at which said light source changes the light-emitting amount (Col. 23, line 23 to col. 24, line 4, Col. 24, Lines 33-64, Col. 27, Line 47 to col. 28, Line 19, Col. 14, Lines 13-24, Col. 13, Lines 35-38).

Regarding Claim 4, Kawabe et al. teaches video-signal-analyzing unit adjusts synchronous timing in accordance with at least one of a period of time in which the video signal is transferred to said display device from said video signal-adjusting unit and a period of time in which said display device responds to the video signal (Col. Col. 41, Lines 6-52, Col. 42, Line 43 to Col. 43, Line 21, Col. 35 Lines 20-41, Col. 27, Line 47 to col. 28, Line 19, Col. 34, line 60 to Col. 35, Line 41).

Regarding Claim 6, Kawabe et al. teaches teaches extracting a feature parameter of the video signal, wherein said synchronizing is adjusted in timing in accordance with the feature parameter (Col. 15, line 50 to Col. 16, Line 22, Col. 33, Lines 28-63, Col. 34, line 60 to Col. 35, Line 41).

Regarding Claim 7, Kawabe et al. teaches a display controller (Col. 8, Lines 1-9, Col. 42, Lines 54,55) for use with a display device (Col. 7, Line 50,51,64); and a light source (Col. 8, Lines 9-15), said display controller comprising: a video signal-analyzing unit (see figure 70 item # 7402, the video data received by 7401 and header is part of the received video data having required video data for image display operable to receive (Col. 42, Lines 54-65), and analyze a video signal, and to generate adjustment parameter information and light source light-emitting amount information (see figures 16,17; teaches parameter information for display see Col. 18, Lines 33-57, see figures 69,70 teaches header part of the video signal contains similar parameters including brightness information provided by parameter Col. 27, Line 63 to Col. 18, line 8, retrieved by analyzing the header information Col. 41, Lines 6-52, Col. 42, Line 54 to Col. 43, Line 3); a video signal-adjusting unit operable to receive the video signal, adjust the video signal in accordance with the adjustment parameter information from said video signal-analyzing unit (see figures 16-20, 69,70, Col. 18, Lines 33-57, Col. 27, Line 63 to Col. 18, Line 8, Col. 41, Lines 6-52, Col. 42, Line 54 to Col. 53, Line 3), and to feed the adjusted video signal into the display device; and a light source-controlling unit operable to feed a light source-controlling signal into the light source in accordance with the light source light-emitting amount information from said video signal-analyzing unit (header part of the video signal contains similar parameters including brightness information provided by parameter Col. 27, Line 63 to Col. 18, line 8, retrieved by analyzing the header information Col. 41, Lines 6-52, Col. 42, Line 54 to Col. 43, Line 3), wherein said video signal-analyzing unit synchronizes a timing at which the display device is to display a picture based on the adjusted video signal from said video signal-adjusting unit, with a timing at which the light source is to change a light-emitting amount in response to

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the light source-controlling signal from said light source-controlling unit (see figures 16,17; teaches parameter information for display see Col. 18, Lines 33-57, see figures 69,70 teaches header part of the video signal contains similar parameters including brightness information provided by parameter Col. 27, Line 63 to Col. 18, line 8, retrieved by analyzing the header information Col. 41, Lines 6-52, Col. 42, Line 54 to Col. 43, Line 3, Col. 35 Lines 20-41, Col. 27, Line 47 to col. 28, Line 19).

Regarding Claim 8, Kawabe et al. teaches video signal-analyzing unit matches the timing at which said light source changes the light-emitting amount with a timing at which said display device renews half of an image plane (Col. 23, line 23 to col. 24, line 4, Col. 24, Lines 33-64, Col. 27, Line 47 to col. 28, Line 19).

Regarding Claim 9, Kawabe et al. teaches video signal-analyzing unit synchronizes, in response to a Vsync-signal from said display device, the timing at which said display device displays the picture with the timing at which said light source changes the light-emitting amount (Col. 23, line 23 to col. 24, line 4, Col. 24, Lines 33-64, Col. 27, Line 47 to col. 28, Line 19, Col. 14, Lines 13-24, Col. 13, Lines 35-38).

Regarding Claim 10, Kawabe et al. teaches video-signal-analyzing unit adjusts synchronous timing in accordance with at least one of a period of time in which the video signal is transferred to said display device from said video signal-adjusting unit and a period of time in which said display device responds to the video signal (Col. Col. 41, Lines 6-52, Col. 42, Line

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43 to Col. 43, Line 21, Col. 35 Lines 20-41, Col. 27, Line 47 to col. 28, Line 19, Col. 34, line 60 to Col. 35, Line 41).

Regarding Claim 12, Kawabe et al. teaches a display apparatus (Col. 7, Lines 50,51) comprising: a display device (Col. 7, Line 64); a light source (Col. 8, Lines 9-15); and a display controller (Col. 8, Lines 1-9, Col. 42, Lines 54,55) comprising: a video signal-analyzing unit operable to receive and analyze a video signal (see figure 70 item # 7402, the video data received by 7401 and header is part of the received video data having required video data for image display Col. 42, Lines 54-65), and to generate adjustment parameter information and light source light-emitting amount information (see figures 16,17; teaches parameter information for display see Col. 18, Lines 33-57, see figures 69,70 teaches header part of the video signal contains similar parameters including brightness information provided by parameter Col. 27, Line 63 to Col. 18, line 8, retrieved by analyzing the header information Col. 41, Lines 6-52, Col. 42, Line 54 to Col. 43, Line 3), a video signal-adjusting unit operable to receive the video signal, adjust the video signal in accordance with the adjustment parameter information from said video signal-analyzing unit, and to feed the adjusted video signal into said display device (see figures 16-20, 69,70, Col. 18, Lines 33-57, Col. 27, Line 63 to Col. 18, Line 8, Col. 41, Lines 6-52, Col. 42, Line 54 to Col. 53, Line 3); and a light source-controlling unit operable to feed a light source-controlling signal into said light source in accordance with the light source light-emitting amount information from said video signal-analyzing unit (header part of the video signal contains similar parameters including brightness information provided by parameter Col. 27, Line 63 to Col. 18, line 8, retrieved by analyzing the header information Col. 41, Lines 6-52, Col. 42, Line



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54 to Col. 43, Line 3), wherein said video signal-analyzing unit synchronizes a timing at which said display device displays a picture based on the adjusted video signal from said video signal-adjusting unit, with a timing at which said light source changes a light-emitting amount in response to the light source-controlling signal from said light source-controlling unit; wherein said display device is operable to display a picture in accordance with the adjusted video signal that is fed from said video signal-adjusting unit of said display controller; and wherein said light source is operable to illuminate said display device with light in accordance with the light source-controlling signal that is fed from said light source-controlling unit of said display controller (see figures 16,17; teaches parameter information for display see Col. 18, Lines 33-57, see figures 69,70 teaches header part of the video signal contains similar parameters including brightness information provided by parameter Col. 27, Line 63 to Col. 18, line 8, retrieved by analyzing the header information Col. 41, Lines 6-52, Col. 42, Line 54 to Col. 43, Line 3, Col. 35 Lines 20-41, Col. 27, Line 47 to col. 28, Line 19).

Regarding Claim 13, Kawabe et al. teaches video signal-analyzing unit matches the timing at which said light source changes the light-emitting amount with a timing at which said display device renews half of an image plane (Col. 23, line 23 to col. 24, line 4, Col. 24, Lines 33-64, Col. 27, Line 47 to col. 28, Line 19).

Regarding Claim 14, Kawabe et al. teaches video signal-analyzing unit synchronizes, in response to a Vsync-signal from said display device, the timing at which said display device displays the picture with the timing at which said light source changes the light-emitting amount

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(Col. 23, line 23 to col. 24, line 4, Col. 24, Lines 33-64, Col. 27, Line 47 to col. 28, Line 19, Col. 14, Lines 13-24, Col. 13, Lines 35-38).

Regarding Claim 15, Kawabe et al. teaches video-signal-analyzing unit adjusts synchronous timing in accordance with at least one of a period of time in which the video signal is transferred to said display device from said video signal-adjusting unit and a period of time in which said display device responds to the video signal (Col. Col. 41, Lines 6-52, Col. 42, Line 43 to Col. 43, Line 21, Col. 35 Lines 20-41, Col. 27, Line 47 to col. 28, Line 19).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5,11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabe et al. (US 7,161,576 B2) as applied to claims 1-4,6-10 and 12-15 above, and further in view of Fujii et al. (US 2003/0038886 A1).

Regarding Claims 5,11 and 16, Kawabe et al. discloses also, in view of the temperature characteristic of the lamp, the lamp is cooled down because the back light is shut off and preventing the brightness from being reduced due to the temperature increase (Col. 27, Lines 43-46).

However, Kawabe et al. fails to recite or disclose a temperature sensor operable to detect temperature, wherein said video signal-analyzing unit adjusts synchronous timing in accordance with the temperature detected by said temperature sensor.

However, Fujii et al. discloses a temperature sensor operable to detect temperature, wherein said video signal-analyzing unit adjusts synchronous timing in accordance with the temperature detected by said temperature sensor (see abstract, page 3, paragraphs 42-44).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Fujii et al. in to the teaching of Kawabe et al. to be able to output a video signal to image display by compensating with temperature requirement by a temperature sensor operable to detect temperature, wherein said video signal-analyzing unit adjusts synchronous timing in accordance with the temperature detected by said temperature sensor to avoid failure of the equipment due to irregular temperature (abstract, page 1, paragraph 14, page 5, paragraphs 87,88).

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kawabe et al. (US 6903716 B2) Display device having improved drive circuit and method of driving same.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M. Dharia whose telephone number is 571-272-7668.

The examiner can normally be reached on M-F 8AM to 5PM.

12. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231



Prabodh Dharia

Partial Signatory Authority

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March 11, 2007